

87163

From: Slobodyansky, Elizabeth  
Sent: Friday, February 21, 2003 11:28 PM  
To: STIC-Biotech/CchemLib  
Subject: 09/590,375

RECEIVED

FEB 24 2003

Please align SEQ ID NO:1 in the above application with SEQ ID NO: 4 in US 6,197,565.

Thank you.

Elizabeth Slobodyansky, PhD

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*B. licheniformis*

Point of Contact:  
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Searcher: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Location: \_\_\_\_\_  
Date Picked Up: \_\_\_\_\_  
Date Completed: \_\_\_\_\_  
Searcher Prep/Review: \_\_\_\_\_  
Clerical: \_\_\_\_\_  
Online time: \_\_\_\_\_

TYPE OF SEARCH:  
NA Sequences: \_\_\_\_\_  
AA Sequences: \_\_\_\_\_  
Structures: \_\_\_\_\_  
Bibliographic: \_\_\_\_\_  
Litigation: \_\_\_\_\_  
Full text: \_\_\_\_\_  
Patent Family: \_\_\_\_\_  
Other: \_\_\_\_\_

VENDOR/COST (where applic.)  
STN: \_\_\_\_\_  
DIALOG: \_\_\_\_\_  
Questel/Orbit: \_\_\_\_\_  
DRLink: \_\_\_\_\_  
Lexis/Nexis: \_\_\_\_\_  
Sequence Sys.: \_\_\_\_\_  
WWW/Internet: \_\_\_\_\_  
Other (specify): \_\_\_\_\_

Slobodjan'sku  
Og 1598 375  
USL 1975c5

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>O <
O | O IntelliGenetics
>O <
```

**bioseqs4 Fast Pairwise Comparison of Sequences**  
Release 5.4

Results file us-09-193-068-4.res made by bshears on Mon 24 Feb 103 10:48:42-PST.

Query sequence being compared: US-09-193-068-4 (1-483)

Number of sequences searched:

1

Results of the initial comparison of US-09-193-068-4 (1-483) with:

File : /home/bshears/slob\*.pep

100-

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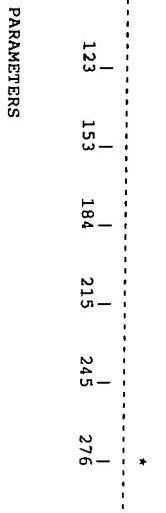
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PARAMETERS

Similarity matrix	Unitary
Mismatch penalty	1
Gap penalty	1.00
Gap size penalty	0.05
Cutoff score	0
Randomization group	0

SEARCH STATISTICS

Scores:	Mean 276	Median 0	Standard Deviation 0.00
Times:	00:00:00.00		Total Elapsed 00:00:00.00

Sequence Name	Description	Length	Score	Init. Opt.	Sig.	Frame
US-09-193-068-4 (1-483)	Sequence 1, Application US/09590375	480	276	301	0.00	0
<hr/>						
Sequence 1, Application US/09590375	GENERAL INFORMATION:					
APPLICANT: ENDO, Keiji et al.	TITLE OF INVENTION: MUTANT ALPHA-AMYLASES					
FILE REFERENCE: 2173-0120P	CURRENT APPLICATION NUMBER: US/09/590,375					
CURRENT FILING DATE: 2000-06-09	PRIOR APPLICATION NUMBER: JP P1999-163569					
PRIOR FILING DATE: 1999-06-10	NUMBER OF SEQ ID NOS: 23					
SEQ ID NO: 1	LENGTH: 480					
TYPE: PRT	ORGANISM: Bacillus sp. KSM-K38					
<hr/>						
Initial Score = 276	Optimized Score = 301	Significance = 0.00				
Residue Identity = 62%	Matches = 302	Mismatches = 178				
Gaps = 3	Conservative Substitutions = 0					
<hr/>						
X ANLNLTMQFEMWENDGNDGHRQLDNLSDAHLAERGIAWIPPAKGTSQADQVGYGAVDLYDGEFHGRGT	X DGLNGSTMMDYEWHLENDGHNWLDDAAALSAGITA WIPPAKGMSQADQVGYGAVDLYDGEFHGRGT	X VRTKYGTKAQLERAIGSLASNDINNVYGDVYMNHKGADTEAVQAVQVNPTNRQDDSGRAYTIDAWGDFDS	X VRTKYGTKAQLERAIGSLASNDINNVYGDVYMNHKGADTEAVQAVQVNPTNRQDDSGRAYTIDAWGDFDS	X GRSQYVSDFKWMMHEDGTDWDESRKLNYKFOCKAWKDEVNKGADTEDVAVEPADRKVISECHLTKAWTHFP	X GRNNWASDFKWRWHRHFGVWDQRYOENHIFRANTNNWRVDEENGNYDYLGSNIDFSHPVQDPELKDWG	X 150 160 170 180 190 200 210
X TWWNELQDGFDRDAVHKIFSKFLRDWNHVRKTFKGEMFTVWQNDLGLENLYJKTNNHNSVDPV	X SWFDELDLDGYRDAIKHIPFWTSMDWVRHORNEADQDLFVQGEYWKDGULEFYDLEMNMESLVDVPL	X 220 230 240 250 260 270 280				
X 220 230 240 250 260 270 280	X 220 230 240 250 260 270 280	X 220 230 240 250 260 270 280				
X HYQHAASTQGGYDMRKLNGVVKSLKSFVNDHDTQPGQESTVOWPKPLAYAFILTRSSGQ	X NYNFYRASQOGGSYDMRNLRLGSVLAEPHMAYTFVNDHDTQPGQESTVOWPKPLAYAFILTRSSGQ	X 290 300 310 320 330 340 350				
X 370 380 390 400 410 420 430	X 370 380 390 400 410 420 430	X 370 380 390 400 410 420 430				
X VFWGDMYTKGDSORETIALKHKIEPIKARKOYAGQHDVFHDHJDVWREGDSVANGLAALITDG	X VFYGDYQIPND--NTISAKKDDMIDELDARONYAYGSTDQHDXDHWVWREGSSRPNSGLATIMSNGP	X 430 440 450 460 470 480 490				
X GGAKKRMVYGRQNAGETWIDITGNRSEPVINSFGWGRHEVNGSVSIVQR	X GGSKWMVYGRONAGOTWIDLTGNGNAGASVTINGDGWGRFTNGGSVSVVNO	X 430 440 450 460 470 480 490				

The scores below are sorted by initial score.

The significance is calculated based on initial score.

A 100% identical sequence to the query sequence was not found.

The list of best scores is: